

APPENDIX D

TRAFFIC REPORT







## **Rancho Las Lomas Traffic Study**

September 2012

Prepared For:  
Rancho Las Lomas

2073006590

# **Rancho Las Lomas Traffic Study**

Located in the County of Orange

**September 24, 2012**

Prepared for:

**Rancho Las Lomas**

19191 Lawrence Canyon

Silverado, CA

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### 1.0 Introduction

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This report summarizes the results of an analysis of the Rancho Las Lomas facility in the County of Orange. The report has been prepared in support of the conditional use permit (CUP) application being prepared for the project site.

### 2.0 Project Description

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The proposed project consists of issuing a CUP for the existing Rancho Las Lomas facility. The project site is located on Santiago Canyon Road at Lawrence Canyon/Crystal Canyon Road approximately one-half mile northwest of the intersection of Santiago Canyon Road and Live Oak Canyon Road as shown in Figure 1. Existing uses on the site include single family residences for the property owner, his private guests, and property caretakers, a chapel, conference center, cafe and gift shop for on-site guests, and exotic animal and bird enclosures. The facilities are used for weddings, corporate events, business seminars, and other social functions. Tours of the animal and bird facilities are by appointment only. These uses have been operating on the site for 15 to 20 years.

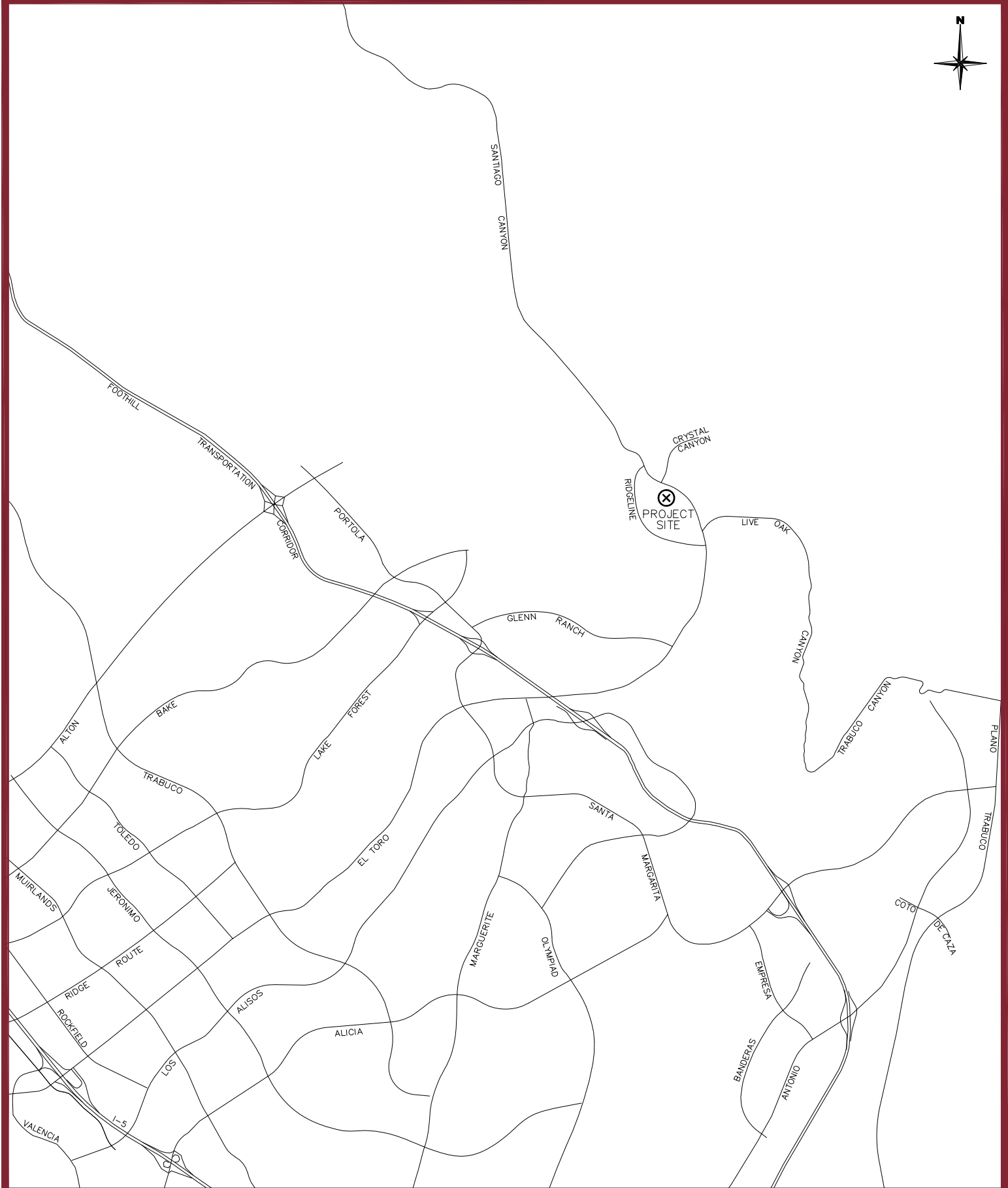
Access to the project site is provided by a gated driveway on Santiago Canyon Road at Lawrence Canyon Road opposite Crystal Canyon Road. A gated maintenance driveway is provided at the south end of the property along Santiago Canyon Road which is used for emergency or maintenance vehicles only. There is no on-site vehicular circulation between the southern driveway and the rest of the site. The site plan is illustrated in Figure 2.

### 3.0 Surrounding Highway Network

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The existing uses take access directly from Santiago Canyon Road opposite Crystal Canyon Road. Santiago Canyon Road is a two-lane highway in the vicinity of the project site with bike lanes, left-turn lanes into the main project driveway and the development opposite the project site on Crystal Canyon Road. Santiago Canyon Road has a speed limit of 55 MPH. Santiago Canyon Road becomes El Toro Road south of Live Oak Canyon Road south of the project site.

The Foothill Transportation Corridor (SR-241) is located south of the project site. Full access to the FTC is provided by Portola Parkway approximately two miles southwest of the project site.



**Stantec**

Project Location

Figure 1



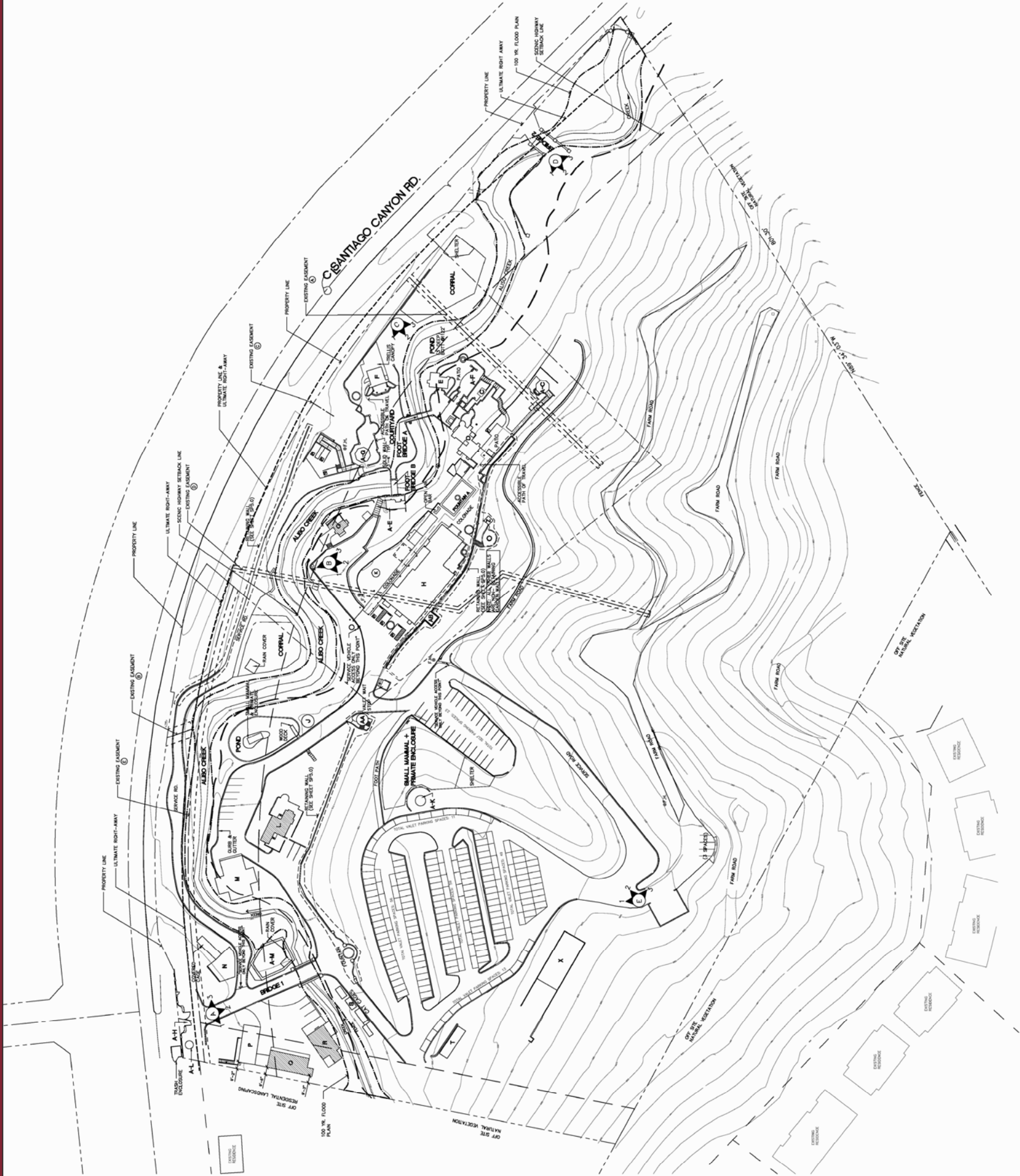
Source: Andrade Architects



Stantec

Site Plan

Figure 2





## RANCHO LAS LOMAS TRAFFIC STUDY

Existing peak hour and daily traffic counts on Santiago Canyon Road were collected in June 2009 by Traffic Data Services, Inc (count data is included in Appendix A). The existing average daily traffic (ADT) volume on Santiago Canyon Road is 6,140 ADT north of the project site and 6,650 ADT south of the project site. Existing weekday peak hour turning movement volumes are illustrated in Figure 3.

### 4.0 Trip Generation

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Counts of the existing project site were conducted in 2002, 2009, and 2010 and are summarized in Table 1 (count data is included in Appendix A). On weekdays when no events are scheduled, the existing site currently generates an average of approximately 50 daily trips, approximately four of which are generated during the AM peak hour and approximately four of which are generated during the PM peak hour based on counts collected in 2002 and 2010.

The Orange County Congestion Management Program (CMP) specifies that projects that generate fewer than 2,400 total daily trips, 1,600 daily trips onto a CMP arterial, or 200 daily trips onto Santiago Canyon Road are exempt from preparing a CMP Traffic Impact Analysis. The project generates approximately 50 daily trips on average. The project is exempt from preparing a CMP TIA report or a detailed Santiago Canyon Road impact analysis.

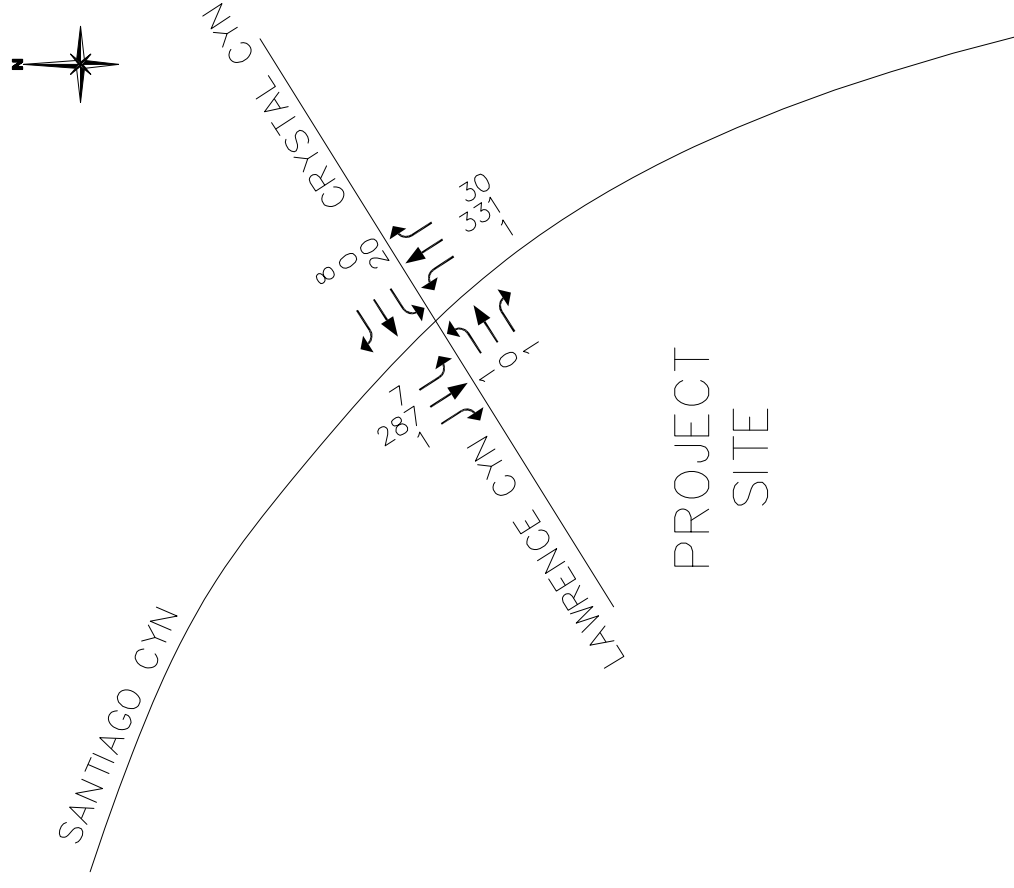
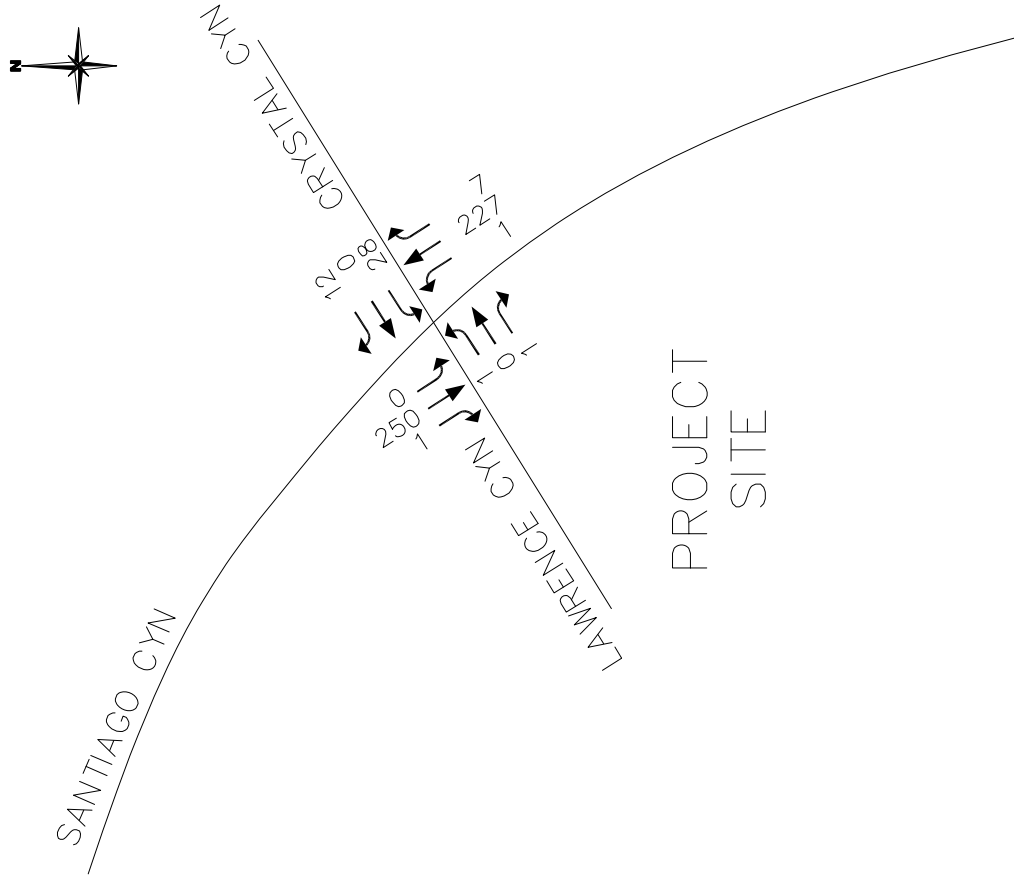
### 5.0 Traffic Impact Analysis

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Peak hour project trips are included in the existing volumes presented earlier. The intersection of Santiago Canyon Road and Lawrence Canyon Road/Crystal Canyon Road is a two-way stop-controlled intersection. The analysis of this intersection is based on the Highway Capacity Manual (HCM) methodology for two-way stop-controlled intersections. Level of service (LOS) is based on the average delay experienced by the higher of the two stop sign controlled side street approaches. The results of the peak hour intersection analysis are summarized in the following table (actual delay calculation sheets are included in Appendix B).

**Existing Intersection Analysis Summary**

Intersection	AM Peak Hour		PM Peak Hour	
	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
Santiago Cyn & Lawrence Cyn/Crystal Cyn	12	B	15	B



## RANCHO LAS LOMAS TRAFFIC STUDY

**Table 1 Existing Site Trip Generation Summary**

Count Date	Day	AM Peak Hour			PM Peak Hour			ADT
		In	Out	Total	In	Out	Total	
Weekday								
2-7-02	Thurs	2	4	6	1	2	3	36
2-8-02	Fri	3	0	3	1	1	2	50
2-11-02	Mon	0	3	0	4	0	4	35
2-12-02	Tues	0	3	3	2	5	7	53
2-13-02	Wed	4	3	7	1	4	5	51
6-25-09	Thurs	3	0	3	0	0	0	--
7-5-10	Mon	1	3	4	6	5	11	87
Weekday Average		2	2	4	2	2	4	52
Weekend								
2-10-02	Sun	--	--	--	--	--	--	31
7-3-10	Sat	--	--	--	--	--	--	93

## RANCHO LAS LOMAS TRAFFIC STUDY

As this table indicates, the intersection is currently operating at LOS B during the AM and PM peak hours. The intersection operates at an acceptable level of service with the existing uses.

A traffic signal warrant for the intersection of Santiago Canyon Road and Lawrence Canyon Road/Crystal Canyon Road was investigated. Installation of a traffic signal at the intersection would require a minimum of 75 vehicles exiting either the project site or Crystal Canyon Road during the peak hour based on the speed on Santiago Canyon Road. The existing peak hour volumes are well below the minimum required for installation of a traffic signal as shown in Figure 4. A traffic signal is not warranted nor recommended at the intersection of Santiago Canyon Road and Lawrence Canyon Road/Crystal Canyon Road.

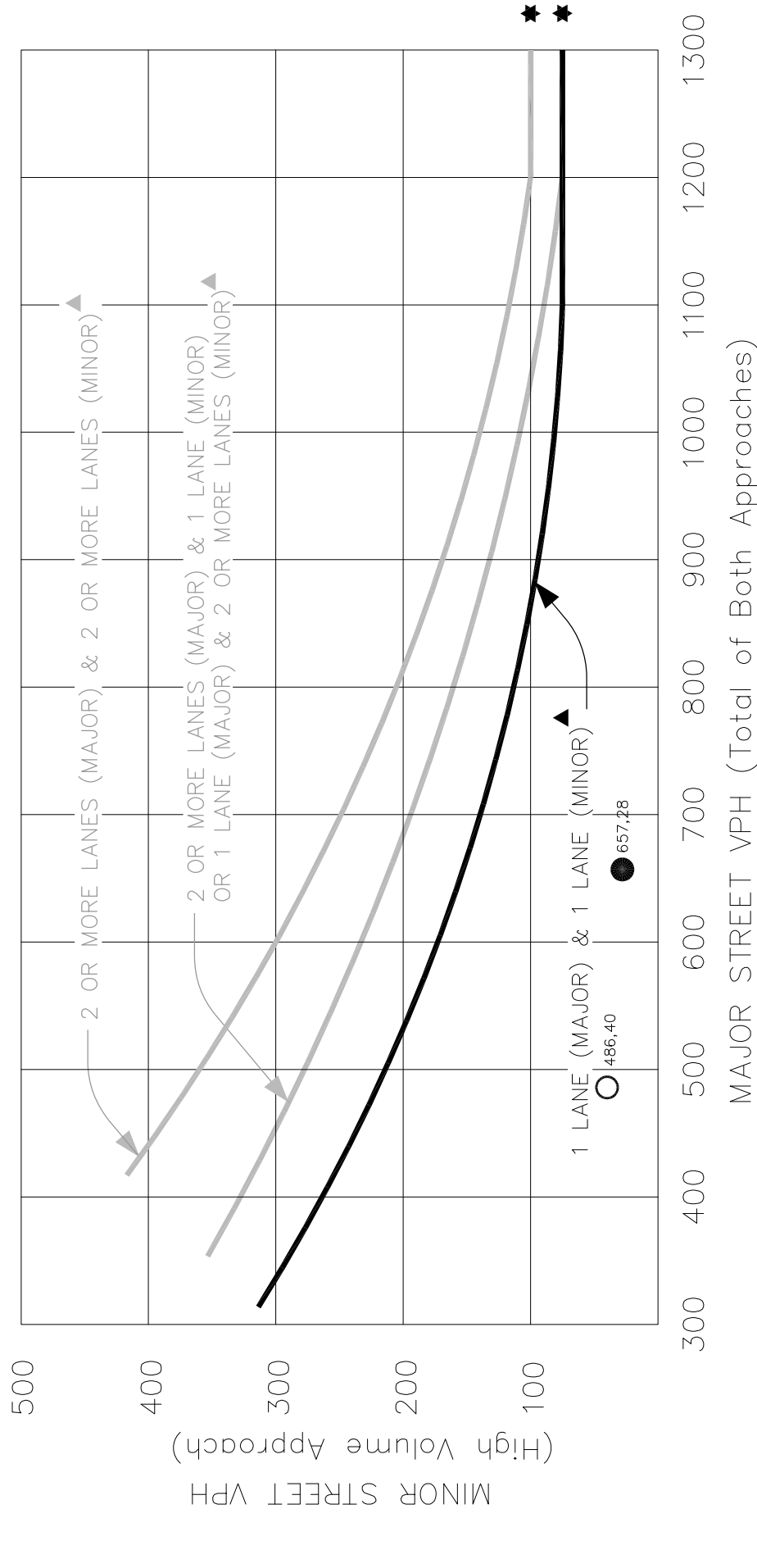
## 6.0 Internal Circulation and Parking

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The internal circulation is comprised of private roadways used only by invited guests and employees of the facility. The main entrance at Lawrence Canyon Road is gated to preclude entry and circulation by the general public. The roadways for guest use vary from 27 feet at the main gate to less than 11 feet. Although the roadways support two-way traffic, there is very little internal traffic. On-site motor vehicle circulation is slow (i.e., approximately 15 MPH) which allows passage of opposing traffic since no parking is permitted on either side of the circulation roadways. As a consequence, the fire department has approved the 20-foot width for fire access lanes as adequate for their purposes. Finally, and perhaps the most convincing argument in support of the width of the roadways is that these roadways have been functioning in this manner for the past 15 to 20 years with no problems of speeding or accident history. The motorists who use these roads expect these conditions and are accustomed to driving accordingly.

The existing ranch operations require 9 parking spaces, and 10 spaces are provided on-site for the ranch. The existing bride's quarters, chapel, conference center, kitchen, and office space require 188 spaces per County Zoning Code Section 7 9 145.6(a) for a total of 197 spaces on-site. Table 2 summarizes the parking requirements for the project. A total of 231 spaces (188 valet parking spaces and 43 self-parking spaces including 8 handicap spaces) will be provided on-site for the bride's quarters, chapel, conference center, kitchen, office space, and ranch operations. Sufficient parking will be provided on-site to accommodate the existing commercial and ranch uses.

Figure 5 illustrates the parking and internal circulation for the site. The site plan and parking and circulation plan have been reviewed and conform to recommendations made for the site.



- AM peak hour Major Street Volume, Minor Street Volume
- PM peak hour Major Street Volume, Minor Street Volume

▲ Note: These curves are recommended for use in community less than 10,000 population or above 40 MPH on Major Street

★ Note: 100 VPH applies as the lower threshold volume for a minor-street approach with two or more lanes, and 75 VPH applies as the lower threshold volume for a minor-street approach with one lane.

Source: MUTCD – Figure 4C-4



## Peak Hour Signal Warrant

Figure 4



# RANCHO LAS LOMAS TRAFFIC STUDY

**Table 2 Parking Summary**

Land Use	Parking Code Section	Requirement	Amount	Parking Spaces
<b>Commercial Uses</b>				
Brides Quarters	Sec 7-9-145.6(a) (24)	1 sp/unit	1 DU	1 sp
Chapel	Sec 7-9-145.6(a) (9)	1 sp/75 sq ft	.455 TSF	7 sp
Conference Center, Kitchen, Storage Fountain Colonnade	Sec 7-9-145.6(a) (9)	1 sp/75 sq ft	5.397 TSF 8.442 TSF <sup>1</sup>	72 sp <u>102 sp</u> 174 sp
Barn	Sec 7-9-145.6(a) (38)	1 sp/TSF	2.156 TSF	3 sp
Ranch Office/Valet	Sec 7-9-145.6(a) (26a)	4 sp/TSF	.346 TSF	2 sp
Storage	Sec 7-9-145.6(a) (38)	1 sp/TSF	.123 TSF	1 sp
<b>Sub-Total</b>				<b>188 sp</b>
<b>Ranch</b>				
Employee Cottage	Sec 7-9-145.3(d) (2a)	1.5 sp/DU	1 DU	2 sp
Ranch House	Sec 7-9-145.3(d) (2b)	2 sp/DU	1 DU	2 sp
Garage	Sec 7-9-145.6(a) (38)	1 sp/TSF	1.268 TSF	2 sp
Duplex	Sec 7-9-145.3(d) (2a)	1.5 sp/DU	2 DU	3 sp
<b>Sub-Total</b>				<b>9 sp</b>
<b>TOTAL</b>				<b>197 sp</b>
Note: <sup>1</sup> less water feature area .831 TSF				







### 7.0 Driveway Operation

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The main project driveway at Lawrence Canyon Road is located on an inside curve on a high-speed arterial. The sight distance of traffic exiting the site allowing the driver to see on-coming vehicles should be provided to allow sufficient time to complete a turn. At 60 mph on Santiago Canyon Road, a driver should be able to see on-coming vehicles 660 feet from the driveway per OCPFRD Standard Plan 1117. This distance is increased for vehicles approaching from the north due to the downgrade. The sight distance plan for vehicles exiting the project driveways is illustrated in Appendix C. This plan illustrates the limited use areas where the height of landscaping would be restricted to 12 inches to provide an adequate line of sight. However, providing this line of sight would require significant oak tree and landscape removal and grading to reduce the size of the landscape berm; therefore, exiting vehicles from the main project driveway will be restricted to right turns only.

Since vehicles would be restricted to right turns only at the project driveway and Santiago Canyon Road is not wide enough to allow U-turns at nearby intersections south of the project, outbound vehicles toward the north would need to exit the driveway via a right turn, and then travel along Ridgeline Road to circle the project site back to Santiago Canyon Road to turn left. A raised pork chop-type median would be installed at the project driveway at Santiago Canyon Road to prohibit outbound left turns. In addition, a right-turn pocket on southbound Santiago Canyon Road would be installed at the project driveway to allow motorists to pull out of the travel lane and slow before turning into the driveway.

The south driveway will be used for emergency access only and will be closed to all other traffic.

### 8.0 Summary and Conclusions

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The proposed project consists of issuing a CUP for the existing Rancho Las Lomas located on Santiago Canyon Road at Lawrence Canyon Road/Crystal Canyon Road. The project peak hour trips are accounted for in the existing traffic counts. The existing level of service at the intersection of Santiago Canyon Road and Lawrence Canyon Road/Crystal Canyon Road is LOS B during the peak hours and the project trips are below the analysis threshold for Santiago Canyon Road in the project vicinity.

Mitigation for the project consists of:

- 1- Payment of fees to the Major Thoroughfare and Bridge Fee Programs listed below, in a manner meeting the approval of the Manager, Subdivision and Grading.
  - a. Foothill/Eastern Transportation Corridor

County of Orange

## RANCHO LAS LOMAS TRAFFIC STUDY

- b. Santiago Canyon Road
- c. Foothill Circulation Phasing Plan
- 2- Restriction of outbound traffic at the project driveway (Lawrence Canyon Road) to right turns only.
- 3- Installation of a southbound right-turn pocket on Santiago Canyon Road at the project driveway (Lawrence Canyon Road).
- 4- Restriction of the south driveway to emergency vehicles only.

# **APPENDIX A**

## **Count Data**

**TRAFFIC DATA SERVICES, INC.**

**(714) 541-2228**

**Summary of Vehicular Turning Movements**

N/S ST : LAWRENCE CANYON RD/CRYSTAL CANYON RD  
E/W ST: SANTIAGO CANYON RD  
CITY: PORTOLA HILLS

FILENAME: 0691001  
DATE: 6/25/09  
DAY: THURSDAY

PERIOD BEGINS	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			Total
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
LANES:	0	1	0	0	1	0	1	1	0	1	1	1	
7:00 AM	0	0	0	3	0	2	0	30	1	1	28	2	67
15 AM	0	0	0	7	0	4	0	60	1	2	57	0	131
30 AM	0	0	0	9	0	4	0	60	0	0	67	3	143
45 AM	0	0	0	4	0	3	0	70	0	0	60	2	139
8:00 AM	0	0	0	8	0	1	0	60	0	0	43	2	114
15 AM	0	0	0	5	0	1	0	65	0	0	55	1	127
30 AM	0	0	0	8	0	2	0	39	0	0	46	4	99
45 AM	0	0	0	7	0	2	0	43	0	0	34	0	86

PEAK HOUR BEGINS AT:

PHF: 0.92

715 AM

VOLUMES = 0 0 0 28 0 12 0 250 1 2 227 7 527

FILENAME: 0691001P

DATE: 6/25/09

DAY: THURSDAY

PERIOD BEGINS	NORTHBOUND			SOUTHBOUND			EASTBOUND			WESTBOUND			Total
	NL	NT	NR	SL	ST	SR	EL	ET	ER	WL	WT	WR	
4:00 PM	3	0	1	6	0	2	0	36	0	1	74	9	132
15 PM	0	0	1	5	0	0	1	54	0	1	78	6	146
30 PM	0	0	1	3	0	0	4	56	0	1	67	3	135
45 PM	0	0	1	7	0	3	0	56	0	1	77	8	153
5:00 PM	0	0	0	4	0	2	1	80	0	0	100	8	195
15 PM	0	0	0	2	0	3	2	55	0	0	95	8	165
30 PM	0	0	0	8	0	1	1	81	0	0	58	6	155
45 PM	0	0	0	6	0	2	3	71	0	0	78	8	168

PEAK HOUR BEGINS AT:

PHF: 0.88

1700 PM

VOLUMES = 0 0 0 20 0 8 7 287 0 0 331 30 683

COMMENTS:

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LOCATION - SANTIAGO CANYON-N/O LAWRENCE CYN/CRYSTAL CYN

VOLUMES FOR - THURSDAY 6/25/09

***** AM *****					***** PM *****																						
TIME		NB		SB		TOTAL		TIME		NB		SB		TOTAL													
*****																											
12:00 - 12:15		7		20		27		12:00 - 12:15		18		26		44													
12:15 - 12:30		4		8		12		12:15 - 12:30		30		46		76													
12:30 - 12:45		2		26		28		12:30 - 12:45		33		23		56													
12:45 - 1:00		5		18		7		61		12		79		12:45 - 1:00		34		115		32		127		66		242	
1:00 - 1:15		1		8		9		1:00 - 1:15		36		38		74													
1:15 - 1:30		0		9		9		1:15 - 1:30		34		38		72													
1:30 - 1:45		2		10		12		1:30 - 1:45		32		39		71													
1:45 - 2:00		2		5		2		29		4		34		1:45 - 2:00		38		140		36		151		74		291	
2:00 - 2:15		2		4		6		2:00 - 2:15		44		41		85													
2:15 - 2:30		1		1		2		2:15 - 2:30		42		30		72													
2:30 - 2:45		1		2		3		2:30 - 2:45		54		36		90													
2:45 - 3:00		0		4		3		10		3		14		2:45 - 3:00		58		198		31		138		89		336	
3:00 - 3:15		3		4		7		3:00 - 3:15		58		48		106													
3:15 - 3:30		3		7		10		3:15 - 3:30		69		36		105													
3:30 - 3:45		2		6		8		3:30 - 3:45		61		46		107													
3:45 - 4:00		1		9		2		19		3		28		3:45 - 4:00		86		274		48		178		134		452	
4:00 - 4:15		3		2		5		4:00 - 4:15		76		34		110													
4:15 - 4:30		1		2		3		4:15 - 4:30		78		48		126													
4:30 - 4:45		10		15		25		4:30 - 4:45		72		66		138													
4:45 - 5:00		6		20		12		31		18		51		4:45 - 5:00		85		311		50		198		135		509	
5:00 - 5:15		10		6		16		5:00 - 5:15		106		74		180													
5:15 - 5:30		8		20		28		5:15 - 5:30		112		60		172													
5:30 - 5:45		10		24		34		5:30 - 5:45		58		79		137													
5:45 - 6:00		13		41		30		80		43		121		5:45 - 6:00		74		350		63		276		137		626	
6:00 - 6:15		25		21		46		6:00 - 6:15		65		68		133													
6:15 - 6:30		40		48		88		6:15 - 6:30		58		58		116													
6:30 - 6:45		43		50		93		6:30 - 6:45		60		47		107													
6:45 - 7:00		46		154		52		171		98		325		6:45 - 7:00		51		234		38		211		89		445	
7:00 - 7:15		53		52		105		7:00 - 7:15		44		34		78													
7:15 - 7:30		68		56		124		7:15 - 7:30		39		27		66													
7:30 - 7:45		72		69		141		7:30 - 7:45		44		24		68													
7:45 - 8:00		69		262		72		249		141		511		7:45 - 8:00		16		143		32		117		48		260	
8:00 - 8:15		47		62		109		8:00 - 8:15		29		30		59													
8:15 - 8:30		54		60		114		8:15 - 8:30		29		24		53													
8:30 - 8:45		52		47		99		8:30 - 8:45		29		28		57													
8:45 - 9:00		36		189		45		214		81		403		8:45 - 9:00		24		111		29		111		53		222	
9:00 - 9:15		31		38		69		9:00 - 9:15		15		13		28													
9:15 - 9:30		28		28		56		9:15 - 9:30		22		26		48													
9:30 - 9:45		36		34		70		9:30 - 9:45		36		20		56													
9:45 - 10:00		30		125		33		133		63		258		9:45 - 10:00		17		90		23		82		40		172	
10:00 - 10:15		18		29		47		10:00 - 10:15		23		16		39													
10:15 - 10:30		26		36		62		10:15 - 10:30		17		8		25													
10:30 - 10:45		28		32		60		10:30 - 10:45		10		62		72													
10:45 - 11:00		29		101		22		119		51		220		10:45 - 11:00		9		59		43		129		52		188	
11:00 - 11:15		22		38		60		11:00 - 11:15		9		40		49													
11:15 - 11:30		32		30		62		11:15 - 11:30		6		28		34													
11:30 - 11:45		31		23		54		11:30 - 11:45		7		6		13													
11:45 - 12:00		26		111		32		123		58		234		11:45 - 12:00		8		30		15		89		23		119	
*****																											
TOTALS		1,039		1,239		2,278		2,055		1,807		3,862															

ADT'S 3,094 3,046 6,140

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LOCATION - SANTIAGO CANYON-S/O LAWRENCE CYN/CRYSTOA CYN

VOLUMES FOR - THURSDAY 6/25/09

\*\*\*\*\* AM \*\*\*\*\* PM \*\*\*\*\*

TIME	NB	SB	TOTAL	TIME	NB	SB	TOTAL
12:00 - 12:15	7	18	25	12:00 - 12:15	21	34	55
12:15 - 12:30	6	11	17	12:15 - 12:30	38	50	88
12:30 - 12:45	3	22	25	12:30 - 12:45	37	33	70
12:45 - 1:00	7	23	11	12:45 - 1:00	38	134	35
			62			152	73
			18				286
			85				
1:00 - 1:15	2	9	11	1:00 - 1:15	41	43	84
1:15 - 1:30	1	9	10	1:15 - 1:30	36	45	81
1:30 - 1:45	2	10	12	1:30 - 1:45	32	42	74
1:45 - 2:00	3	8	2	1:45 - 2:00	40	149	34
			30			164	74
			5				313
			38				
2:00 - 2:15	2	4	6	2:00 - 2:15	48	50	98
2:15 - 2:30	1	0	1	2:15 - 2:30	44	28	72
2:30 - 2:45	1	3	4	2:30 - 2:45	60	46	106
2:45 - 3:00	0	4	4	2:45 - 3:00	62	214	31
			11			155	93
			4				369
			15				
3:00 - 3:15	3	4	7	3:00 - 3:15	62	48	110
3:15 - 3:30	3	7	10	3:15 - 3:30	78	45	123
3:30 - 3:45	2	6	8	3:30 - 3:45	64	47	111
3:45 - 4:00	1	9	2	3:45 - 4:00	93	297	47
			19			187	140
			3				484
			28				
4:00 - 4:15	3	2	5	4:00 - 4:15	86	46	132
4:15 - 4:30	2	2	4	4:15 - 4:30	83	56	139
4:30 - 4:45	8	15	23	4:30 - 4:45	75	64	139
4:45 - 5:00	8	21	12	4:45 - 5:00	90	334	56
			31			222	146
			20				556
			52				
5:00 - 5:15	9	6	15	5:00 - 5:15	106	80	186
5:15 - 5:30	7	19	26	5:15 - 5:30	112	67	179
5:30 - 5:45	12	25	37	5:30 - 5:45	64	84	148
5:45 - 6:00	13	41	32	5:45 - 6:00	80	362	66
			82			297	146
			45				659
			123				
6:00 - 6:15	26	26	52	6:00 - 6:15	70	72	142
6:15 - 6:30	38	48	86	6:15 - 6:30	68	60	128
6:30 - 6:45	42	53	95	6:30 - 6:45	65	54	119
6:45 - 7:00	46	152	51	6:45 - 7:00	52	255	40
			178			226	92
			97				481
			330				
7:00 - 7:15	55	57	112	7:00 - 7:15	58	41	99
7:15 - 7:30	68	60	128	7:15 - 7:30	43	30	73
7:30 - 7:45	71	77	148	7:30 - 7:45	46	28	74
7:45 - 8:00	67	261	80	7:45 - 8:00	23	170	31
			274			130	54
			147				300
			535				
8:00 - 8:15	51	68	119	8:00 - 8:15	30	35	65
8:15 - 8:30	52	68	120	8:15 - 8:30	31	22	53
8:30 - 8:45	52	54	106	8:30 - 8:45	35	25	60
8:45 - 9:00	35	190	50	8:45 - 9:00	30	126	28
			240			110	58
			85				236
			430				
9:00 - 9:15	36	42	78	9:00 - 9:15	20	12	32
9:15 - 9:30	28	30	58	9:15 - 9:30	27	25	52
9:30 - 9:45	40	40	80	9:30 - 9:45	40	22	62
9:45 - 10:00	32	136	37	9:45 - 10:00	32	119	24
			149			83	56
			69				202
			285				
10:00 - 10:15	23	38	61	10:00 - 10:15	27	20	47
10:15 - 10:30	34	39	73	10:15 - 10:30	20	12	32
10:30 - 10:45	27	34	61	10:30 - 10:45	10	56	66
10:45 - 11:00	30	114	28	10:45 - 11:00	13	70	50
			139			138	63
			58				208
			253				
11:00 - 11:15	24	42	66	11:00 - 11:15	12	40	52
11:15 - 11:30	35	32	67	11:15 - 11:30	7	29	36
11:30 - 11:45	28	27	55	11:30 - 11:45	13	10	23
11:45 - 12:00	23	110	36	11:45 - 12:00	8	40	17
			137			96	25
			59				136
			247				
TOTALS	1,069	1,352	2,421		2,270	1,960	4,230
ADT'S					3,339	3,312	6,651

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LOCATION - LAWRENCE CANYON-S/O SANTIAGO CANYON

VOLUMES FOR - SATURDAY 7/3/10

\*\*\*\*\* AM \*\*\*\*\* PM \*\*\*\*\*

TIME	NB	SB	TOTAL	TIME	NB	SB	TOTAL
12:00 - 12:15	0	0	0	12:00 - 12:15	0	1	1
12:15 - 12:30	0	0	0	12:15 - 12:30	1	1	2
12:30 - 12:45	1	0	1	12:30 - 12:45	0	0	0
12:45 - 1:00	0	1	0	12:45 - 1:00	1	2	3
1:00 - 1:15	1	0	1	1:00 - 1:15	1	2	3
1:15 - 1:30	0	0	0	1:15 - 1:30	0	0	0
1:30 - 1:45	0	0	0	1:30 - 1:45	0	0	0
1:45 - 2:00	0	1	0	1:45 - 2:00	2	3	5
2:00 - 2:15	0	0	0	2:00 - 2:15	1	1	2
2:15 - 2:30	0	0	0	2:15 - 2:30	0	0	0
2:30 - 2:45	0	0	0	2:30 - 2:45	2	2	4
2:45 - 3:00	0	0	0	2:45 - 3:00	1	4	5
3:00 - 3:15	0	0	0	3:00 - 3:15	0	0	0
3:15 - 3:30	0	0	0	3:15 - 3:30	3	3	6
3:30 - 3:45	0	0	0	3:30 - 3:45	1	0	1
3:45 - 4:00	0	0	0	3:45 - 4:00	1	5	6
4:00 - 4:15	0	0	0	4:00 - 4:15	1	1	2
4:15 - 4:30	0	0	0	4:15 - 4:30	0	0	0
4:30 - 4:45	0	0	0	4:30 - 4:45	0	0	0
4:45 - 5:00	0	0	0	4:45 - 5:00	1	2	3
5:00 - 5:15	0	0	0	5:00 - 5:15	1	0	1
5:15 - 5:30	0	0	0	5:15 - 5:30	0	0	0
5:30 - 5:45	0	0	0	5:30 - 5:45	1	0	1
5:45 - 6:00	0	0	0	5:45 - 6:00	0	2	2
6:00 - 6:15	0	2	2	6:00 - 6:15	1	1	2
6:15 - 6:30	0	0	0	6:15 - 6:30	1	0	1
6:30 - 6:45	0	0	0	6:30 - 6:45	0	0	0
6:45 - 7:00	0	1	1	6:45 - 7:00	0	2	2
7:00 - 7:15	0	0	0	7:00 - 7:15	0	0	0
7:15 - 7:30	0	1	1	7:15 - 7:30	0	0	0
7:30 - 7:45	0	0	0	7:30 - 7:45	0	0	0
7:45 - 8:00	0	0	0	7:45 - 8:00	0	0	0
8:00 - 8:15	0	0	0	8:00 - 8:15	0	0	0
8:15 - 8:30	0	2	2	8:15 - 8:30	0	1	1
8:30 - 8:45	1	1	2	8:30 - 8:45	0	0	0
8:45 - 9:00	0	4	4	8:45 - 9:00	0	0	0
9:00 - 9:15	0	1	1	9:00 - 9:15	0	0	0
9:15 - 9:30	0	1	1	9:15 - 9:30	0	0	0
9:30 - 9:45	2	2	4	9:30 - 9:45	0	0	0
9:45 - 10:00	0	2	2	9:45 - 10:00	0	0	0
10:00 - 10:15	2	2	4	10:00 - 10:15	0	0	0
10:15 - 10:30	1	1	2	10:15 - 10:30	1	1	2
10:30 - 10:45	5	3	8	10:30 - 10:45	0	0	0
10:45 - 11:00	2	3	5	10:45 - 11:00	0	1	1
11:00 - 11:15	3	2	5	11:00 - 11:15	0	0	0
11:15 - 11:30	1	0	1	11:15 - 11:30	0	1	1
11:30 - 11:45	1	1	2	11:30 - 11:45	0	0	0
11:45 - 12:00	2	1	3	11:45 - 12:00	0	0	0

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TOTALS	22	30	52	21	20	41
ADT'S	43	50	93			

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LOCATION - LAWRENCE CANYON-S/O SANTIAGO CANYON

VOLUMES FOR - MONDAY 7/5/10

\*\*\*\*\* AM \*\*\*\*\* PM \*\*\*\*\*

TIME	NB	SB	TOTAL	TIME	NB	SB	TOTAL
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12:00 - 12:15	3	2	5	12:00 - 12:15	0	0	0
---------------	---	---	---	---------------	---	---	---

12:15 - 12:30	0	0	0	12:15 - 12:30	0	0	0
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12:30 - 12:45	0	0	0	12:30 - 12:45	4	1	5
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12:45 - 1:00	1	4	0	2	1	5	1	2	7
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1:00 - 1:15	0	0	0	1:00 - 1:15	1	0	1
-------------	---	---	---	-------------	---	---	---

1:15 - 1:30	0	0	0	1:15 - 1:30	0	0	0
-------------	---	---	---	-------------	---	---	---

1:30 - 1:45	0	0	0	1:30 - 1:45	0	0	0
-------------	---	---	---	-------------	---	---	---

1:45 - 2:00	0	0	0	1:45 - 2:00	0	1	0	0	1
-------------	---	---	---	-------------	---	---	---	---	---

2:00 - 2:15	0	0	0	2:00 - 2:15	1	1	2
-------------	---	---	---	-------------	---	---	---

2:15 - 2:30	0	0	0	2:15 - 2:30	0	2	2
-------------	---	---	---	-------------	---	---	---

2:30 - 2:45	0	0	0	2:30 - 2:45	1	1	2
-------------	---	---	---	-------------	---	---	---

2:45 - 3:00	0	0	0	2:45 - 3:00	1	3	1	5	2	8
-------------	---	---	---	-------------	---	---	---	---	---	---

3:00 - 3:15	0	0	0	3:00 - 3:15	2	1	3
-------------	---	---	---	-------------	---	---	---

3:15 - 3:30	0	0	0	3:15 - 3:30	0	0	0
-------------	---	---	---	-------------	---	---	---

3:30 - 3:45	0	0	0	3:30 - 3:45	0	0	0
-------------	---	---	---	-------------	---	---	---

3:45 - 4:00	0	0	0	3:45 - 4:00	2	4	0	1	2	5
-------------	---	---	---	-------------	---	---	---	---	---	---

4:00 - 4:15	0	0	0	4:00 - 4:15	0	2	2
-------------	---	---	---	-------------	---	---	---

4:15 - 4:30	0	0	0	4:15 - 4:30	1	0	1
-------------	---	---	---	-------------	---	---	---

4:30 - 4:45	0	0	0	4:30 - 4:45	1	1	2
-------------	---	---	---	-------------	---	---	---

4:45 - 5:00	0	0	0	4:45 - 5:00	1	3	0	3	1	6
-------------	---	---	---	-------------	---	---	---	---	---	---

5:00 - 5:15	0	0	0	5:00 - 5:15	0	1	1
-------------	---	---	---	-------------	---	---	---

5:15 - 5:30	0	0	0	5:15 - 5:30	3	0	3
-------------	---	---	---	-------------	---	---	---

5:30 - 5:45	0	0	0	5:30 - 5:45	2	2	4
-------------	---	---	---	-------------	---	---	---

5:45 - 6:00	0	0	0	5:45 - 6:00	1	6	2	5	3	11
-------------	---	---	---	-------------	---	---	---	---	---	----

6:00 - 6:15	0	0	0	6:00 - 6:15	1	2	3
-------------	---	---	---	-------------	---	---	---

6:15 - 6:30	0	0	0	6:15 - 6:30	0	1	1
-------------	---	---	---	-------------	---	---	---

6:30 - 6:45	0	0	0	6:30 - 6:45	1	0	1
-------------	---	---	---	-------------	---	---	---

6:45 - 7:00	0	0	1	1	1	3	0	3	1	6
-------------	---	---	---	---	---	---	---	---	---	---

7:00 - 7:15	0	0	0	7:00 - 7:15	1	0	1
-------------	---	---	---	-------------	---	---	---

7:15 - 7:30	0	0	0	7:15 - 7:30	0	0	0
-------------	---	---	---	-------------	---	---	---

7:30 - 7:45	0	0	0	7:30 - 7:45	1	0	1
-------------	---	---	---	-------------	---	---	---

7:45 - 8:00	0	0	0	7:45 - 8:00	0	2	0	0	0	2
-------------	---	---	---	-------------	---	---	---	---	---	---

8:00 - 8:15	0	0	0	8:00 - 8:15	0	0	0
-------------	---	---	---	-------------	---	---	---

8:15 - 8:30	0	2	2	8:15 - 8:30	0	0	0
-------------	---	---	---	-------------	---	---	---

8:30 - 8:45	1	1	2	8:30 - 8:45	0	0	0
-------------	---	---	---	-------------	---	---	---

8:45 - 9:00	0	1	0	3	0	0	0	0	0	0
-------------	---	---	---	---	---	---	---	---	---	---

9:00 - 9:15	0	0	0	9:00 - 9:15	0	0	0
-------------	---	---	---	-------------	---	---	---

9:15 - 9:30	0	0	0	9:15 - 9:30	4	0	4
-------------	---	---	---	-------------	---	---	---

9:30 - 9:45	1	2	3	9:30 - 9:45	0	2	2
-------------	---	---	---	-------------	---	---	---

9:45 - 10:00	3	4	4	6	7	10	9:45 - 10:00	1	5	0	2	1	7
--------------	---	---	---	---	---	----	--------------	---	---	---	---	---	---

10:00 - 10:15	1	1	2	10:00 - 10:15	1	1	2
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10:15 - 10:30	4	2	6	10:15 - 10:30	0	0	0
---------------	---	---	---	---------------	---	---	---

10:30 - 10:45	2	1	3	10:30 - 10:45	0	0	0
---------------	---	---	---	---------------	---	---	---

10:45 - 11:00	0	7	0	4	0	1	0	1	0	2
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11:00 - 11:15	0	0	0	11:00 - 11:15	0	0	0
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11:15 - 11:30	0	0	0	11:15 - 11:30	0	0	0
---------------	---	---	---	---------------	---	---	---

11:30 - 11:45	0	0	0	11:30 - 11:45	0	0	0
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11:45 - 12:00	0	0	0	11:45 - 12:00	0	0	0	0	0	0
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TOTALS	16	16	32	33	22	55
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ADT'S	49	38	87
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LOCATION - LAWRENCE CANYON-JUST W/O SANTIAGO CYN

VOLUMES FOR - THURSDAY 2/7/02

\*\*\*\*\* AM \*\*\*\*\* PM \*\*\*\*\*

TIME	EB	WB	TOTAL	TIME	EB (OUT)	WB (IN)	TOTAL
------	----	----	-------	------	----------	---------	-------

12:00 - 12:15	-	-	-	12:00 - 12:15	0	0	0
12:15 - 12:30	-	-	-	12:15 - 12:30	1	0	1
12:30 - 12:45	-	-	-	12:30 - 12:45	0	0	0
12:45 - 1:00	-	-	-	12:45 - 1:00	0	1	0

1:00 - 1:15	-	-	-	1:00 - 1:15	1	0	1
1:15 - 1:30	-	-	-	1:15 - 1:30	0	0	0
1:30 - 1:45	-	-	-	1:30 - 1:45	0	0	0
1:45 - 2:00	-	-	-	1:45 - 2:00	1	2	0

2:00 - 2:15	-	-	-	2:00 - 2:15	0	1	1
2:15 - 2:30	-	-	-	2:15 - 2:30	0	1	1
2:30 - 2:45	-	-	-	2:30 - 2:45	0	0	0
2:45 - 3:00	-	-	-	2:45 - 3:00	0	0	2

3:00 - 3:15	-	-	-	3:00 - 3:15	0	0	0
3:15 - 3:30	-	-	-	3:15 - 3:30	0	0	0
3:30 - 3:45	-	-	-	3:30 - 3:45	1	0	1
3:45 - 4:00	-	-	-	3:45 - 4:00	2	3	3

4:00 - 4:15	-	-	-	4:00 - 4:15	1	1	2
4:15 - 4:30	-	-	-	4:15 - 4:30	0	1	1
4:30 - 4:45	-	-	-	4:30 - 4:45	0	0	0
4:45 - 5:00	-	-	-	4:45 - 5:00	0	1	0

5:00 - 5:15	-	-	-	5:00 - 5:15	0	1	1
5:15 - 5:30	-	-	-	5:15 - 5:30	0	2	2
5:30 - 5:45	-	-	-	5:30 - 5:45	0	0	0
5:45 - 6:00	-	-	-	5:45 - 6:00	0	0	3

6:00 - 6:15	-	-	-	6:00 - 6:15	0	0	0
6:15 - 6:30	-	-	-	6:15 - 6:30	0	0	0
6:30 - 6:45	-	-	-	6:30 - 6:45	0	0	0
6:45 - 7:00	-	-	-	6:45 - 7:00	0	0	0

7:00 - 7:15	-	-	-	7:00 - 7:15	0	0	0
7:15 - 7:30	-	-	-	7:15 - 7:30	0	0	0
7:30 - 7:45	-	-	-	7:30 - 7:45	0	0	0
7:45 - 8:00	-	-	-	7:45 - 8:00	0	0	0

8:00 - 8:15	-	-	-	8:00 - 8:15	0	0	0
8:15 - 8:30	-	-	-	8:15 - 8:30	0	0	0
8:30 - 8:45	-	-	-	8:30 - 8:45	0	0	0
8:45 - 9:00	-	-	-	8:45 - 9:00	0	0	0

9:00 - 9:15	-	-	-	9:00 - 9:15	0	0	0
9:15 - 9:30	-	-	-	9:15 - 9:30	0	0	0
9:30 - 9:45	-	-	-	9:30 - 9:45	0	0	0
9:45 - 10:00	-	-	-	9:45 - 10:00	0	0	0

10:00 - 10:15	-	-	-	10:00 - 10:15	0	0	0
10:15 - 10:30	-	-	-	10:15 - 10:30	0	0	0
10:30 - 10:45	-	-	-	10:30 - 10:45	0	0	0
10:45 - 11:00	-	-	-	10:45 - 11:00	0	0	0

11:00 - 11:15	-	-	-	11:00 - 11:15	0	0	0
11:15 - 11:30	-	-	-	11:15 - 11:30	0	0	0
11:30 - 11:45	-	-	-	11:30 - 11:45	0	0	0
11:45 - 12:00	-	-	-	11:45 - 12:00	0	0	0

TOTALS	-	-	-	7	10	17
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ADT'S	7	10	17
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LOCATION - LAWRENCE CANYON-JUST W/O SANTIAGO CYN

VOLUMES FOR - FRIDAY 2/8/02

\*\*\*\*\* AM \*\*\*\*\*

\*\*\*\*\* PM \*\*\*\*\*

TIME	EB	WB	TOTAL	TIME	EB	WB	TOTAL
------	----	----	-------	------	----	----	-------

12:00 - 12:15	0	0	0	12:00 - 12:15	2	0	2
12:15 - 12:30	0	0	0	12:15 - 12:30	1	3	4
12:30 - 12:45	0	0	0	12:30 - 12:45	2	0	2
12:45 - 1:00	0	0	0	12:45 - 1:00	0	5	1

1:00 - 1:15	0	0	0	1:00 - 1:15	0	2	2
1:15 - 1:30	0	0	0	1:15 - 1:30	0	0	0
1:30 - 1:45	0	2	2	1:30 - 1:45	0	0	0
1:45 - 2:00	0	0	1	1:45 - 2:00	0	0	0

2:00 - 2:15	0	2	2	2:00 - 2:15	0	0	0
2:15 - 2:30	0	0	0	2:15 - 2:30	2	0	2
2:30 - 2:45	0	0	0	2:30 - 2:45	0	0	0
2:45 - 3:00	0	0	0	2:45 - 3:00	1	3	1

3:00 - 3:15	2	0	2	3:00 - 3:15	0	0	0
3:15 - 3:30	0	0	0	3:15 - 3:30	1	0	1
3:30 - 3:45	0	0	0	3:30 - 3:45	1	0	1
3:45 - 4:00	0	2	0	3:45 - 4:00	0	2	0

4:00 - 4:15	0	0	0	4:00 - 4:15	0	0	0
4:15 - 4:30	0	0	0	4:15 - 4:30	1	-	0
4:30 - 4:45	0	0	0	4:30 - 4:45	0	0	0
4:45 - 5:00	0	0	0	4:45 - 5:00	1	2	0

5:00 - 5:15	0	0	0	5:00 - 5:15	0	0	0
5:15 - 5:30	0	0	0	5:15 - 5:30	0	0	0
5:30 - 5:45	0	0	0	5:30 - 5:45	0	1	1
5:45 - 6:00	0	0	0	5:45 - 6:00	1	1	0

6:00 - 6:15	0	0	0	6:00 - 6:15	0	0	0
6:15 - 6:30	0	0	0	6:15 - 6:30	1	0	1
6:30 - 6:45	1	0	1	6:30 - 6:45	2	0	2
6:45 - 7:00	2	3	0	6:45 - 7:00	0	3	0

7:00 - 7:15	1	0	1	7:00 - 7:15	0	0	0
7:15 - 7:30	0	0	0	7:15 - 7:30	0	3	3
7:30 - 7:45	0	0	0	7:30 - 7:45	0	0	0
7:45 - 8:00	0	1	0	7:45 - 8:00	0	0	0

8:00 - 8:15	0	0	0	8:00 - 8:15	0	0	0
8:15 - 8:30	0	0	0	8:15 - 8:30	0	0	0
8:30 - 8:45	0	0	0	8:30 - 8:45	0	0	0
8:45 - 9:00	0	0	0	8:45 - 9:00	0	0	0

9:00 - 9:15	1	1	2	9:00 - 9:15	0	0	0
9:15 - 9:30	0	0	0	9:15 - 9:30	0	0	0
9:30 - 9:45	0	0	0	9:30 - 9:45	0	0	0
9:45 - 10:00	0	1	0	9:45 - 10:00	0	0	0

10:00 - 10:15	0	0	0	10:00 - 10:15	0	0	0
10:15 - 10:30	0	2	2	10:15 - 10:30	0	0	0
10:30 - 10:45	0	0	0	10:30 - 10:45	0	0	0
10:45 - 11:00	1	1	1	10:45 - 11:00	0	0	0

11:00 - 11:15	3	1	4	11:00 - 11:15	0	0	0
11:15 - 11:30	1	2	3	11:15 - 11:30	0	0	0
11:30 - 11:45	0	0	0	11:30 - 11:45	0	0	0
11:45 - 12:00	0	4	0	11:45 - 12:00	0	0	0

TOTALS	12	12	24	16	11	26
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ADT'S	28	23	50
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LOCATION - LAWRENCE CANYON-JUST W/O SANTIAGO CYN

VOLUMES FOR - SUNDAY 2/10/02

\*\*\*\*\* AM \*\*\*\*\*

\*\*\*\*\* PM \*\*\*\*\*

TIME	EB	WB	TOTAL	TIME	EB	WB	TOTAL
------	----	----	-------	------	----	----	-------

12:00 - 12:15	0	0	0	12:00 - 12:15	0	2	2
12:15 - 12:30	0	0	0	12:15 - 12:30	2	0	2
12:30 - 12:45	0	0	0	12:30 - 12:45	0	2	2
12:45 - 1:00	0	0	0	12:45 - 1:00	0	2	3

1:00 - 1:15	0	0	0	1:00 - 1:15	0	2	2
1:15 - 1:30	0	0	0	1:15 - 1:30	0	1	1
1:30 - 1:45	0	0	0	1:30 - 1:45	1	1	2
1:45 - 2:00	0	0	0	1:45 - 2:00	0	1	0

2:00 - 2:15	0	0	0	2:00 - 2:15	1	0	1
2:15 - 2:30	0	0	0	2:15 - 2:30	1	1	2
2:30 - 2:45	0	0	0	2:30 - 2:45	0	0	0
2:45 - 3:00	0	0	0	2:45 - 3:00	0	2	0

3:00 - 3:15	0	0	0	3:00 - 3:15	0	0	0
3:15 - 3:30	0	0	0	3:15 - 3:30	0	0	0
3:30 - 3:45	0	0	0	3:30 - 3:45	0	0	0
3:45 - 4:00	0	0	0	3:45 - 4:00	0	0	0

4:00 - 4:15	0	0	0	4:00 - 4:15	0	0	0
4:15 - 4:30	0	0	0	4:15 - 4:30	0	2	2
4:30 - 4:45	0	0	0	4:30 - 4:45	0	0	0
4:45 - 5:00	0	0	0	4:45 - 5:00	0	0	0

5:00 - 5:15	0	0	0	5:00 - 5:15	1	0	1
5:15 - 5:30	0	0	0	5:15 - 5:30	0	0	0
5:30 - 5:45	0	0	0	5:30 - 5:45	0	0	0
5:45 - 6:00	0	0	0	5:45 - 6:00	0	1	0

6:00 - 6:15	0	0	0	6:00 - 6:15	0	0	0
6:15 - 6:30	0	0	0	6:15 - 6:30	0	0	0
6:30 - 6:45	0	0	0	6:30 - 6:45	0	0	0
6:45 - 7:00	0	0	0	6:45 - 7:00	0	0	0

7:00 - 7:15	0	0	0	7:00 - 7:15	0	0	0
7:15 - 7:30	0	0	0	7:15 - 7:30	0	0	0
7:30 - 7:45	0	0	0	7:30 - 7:45	0	0	0
7:45 - 8:00	0	0	0	7:45 - 8:00	0	0	0

8:00 - 8:15	0	0	0	8:00 - 8:15	0	0	0
8:15 - 8:30	0	0	0	8:15 - 8:30	0	0	0
8:30 - 8:45	0	0	0	8:30 - 8:45	0	0	0
8:45 - 9:00	0	0	0	8:45 - 9:00	0	0	0

9:00 - 9:15	0	0	0	9:00 - 9:15	0	0	0
9:15 - 9:30	0	0	0	9:15 - 9:30	0	0	0
9:30 - 9:45	2	0	2	9:30 - 9:45	1	1	2
9:45 - 10:00	0	2	0	9:45 - 10:00	0	1	0

10:00 - 10:15	0	2	2	10:00 - 10:15	0	0	0
10:15 - 10:30	0	0	0	10:15 - 10:30	0	0	0
10:30 - 10:45	0	0	0	10:30 - 10:45	0	0	0
10:45 - 11:00	1	1	0	10:45 - 11:00	0	0	0

11:00 - 11:15	0	0	0	11:00 - 11:15	0	0	0
11:15 - 11:30	0	0	0	11:15 - 11:30	0	0	0
11:30 - 11:45	0	0	0	11:30 - 11:45	0	0	0
11:45 - 12:00	2	2	2	11:45 - 12:00	0	0	0

TOTALS	5	4	9	7	15	22
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ADT'S	12	19	31
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LOCATION - LAWRENCE CANYON-JUST W/O SANTIAGO CYN

VOLUMES FOR - MONDAY 2/11/02

\*\*\*\*\* AM \*\*\*\*\* PM \*\*\*\*\*

TIME EB WB TOTAL TIME EB WB TOTAL

\*\*\*\*\*

12:00 - 12:15 0 0 0 12:00 - 12:15 0 1 1

12:15 - 12:30 0 0 0 12:15 - 12:30 0 0 0

12:30 - 12:45 0 0 0 12:30 - 12:45 2 3 5

12:45 - 1:00 0 0 0 0 12:45 - 1:00 1 3 0 4 1 7

1:00 - 1:15 0 0 0 1:00 - 1:15 0 0 0

1:15 - 1:30 0 0 0 1:15 - 1:30 0 0 0

1:30 - 1:45 0 0 0 1:30 - 1:45 0 1 1

1:45 - 2:00 0 0 0 0 1:45 - 2:00 0 0 0 1 0 1

2:00 - 2:15 0 0 0 2:00 - 2:15 3 1 4

2:15 - 2:30 0 0 0 2:15 - 2:30 0 0 0

2:30 - 2:45 0 0 0 2:30 - 2:45 0 0 0

2:45 - 3:00 0 0 0 0 2:45 - 3:00 0 3 1 2 1 5

3:00 - 3:15 0 0 0 3:00 - 3:15 0 0 0

3:15 - 3:30 0 0 0 3:15 - 3:30 0 2 2

3:30 - 3:45 0 0 0 3:30 - 3:45 0 1 1

3:45 - 4:00 0 0 0 0 3:45 - 4:00 0 0 0 3 0 3

4:00 - 4:15 0 0 0 4:00 - 4:15 2 0 2

4:15 - 4:30 0 0 0 4:15 - 4:30 0 0 0

4:30 - 4:45 0 0 0 4:30 - 4:45 0 0 0

4:45 - 5:00 0 0 0 0 4:45 - 5:00 2 4 0 0 2 4

5:00 - 5:15 0 0 0 5:00 - 5:15 0 1 1

5:15 - 5:30 0 0 0 5:15 - 5:30 0 0 0

5:30 - 5:45 0 0 0 5:30 - 5:45 0 0 0

5:45 - 6:00 0 0 0 0 5:45 - 6:00 0 0 0 1 0 1

6:00 - 6:15 0 0 0 6:00 - 6:15 0 1 1

6:15 - 6:30 0 0 0 6:15 - 6:30 0 0 0

6:30 - 6:45 0 0 0 6:30 - 6:45 0 0 0

6:45 - 7:00 2 2 0 0 6:45 - 7:00 0 0 1 2 1 2

7:00 - 7:15 0 2 2 7:00 - 7:15 0 0 0

7:15 - 7:30 0 1 1 7:15 - 7:30 0 0 0

7:30 - 7:45 0 0 0 7:30 - 7:45 0 0 0

7:45 - 8:00 0 0 0 3 7:45 - 8:00 0 0 0 0 0 0

8:00 - 8:15 0 0 0 8:00 - 8:15 0 0 0

8:15 - 8:30 0 0 0 8:15 - 8:30 0 0 0

8:30 - 8:45 1 0 1 8:30 - 8:45 0 0 0

8:45 - 9:00 0 1 0 0 8:45 - 9:00 0 0 0 0 0 0

9:00 - 9:15 0 1 1 9:00 - 9:15 0 0 0

9:15 - 9:30 0 0 0 9:15 - 9:30 0 0 0

9:30 - 9:45 0 0 0 9:30 - 9:45 0 0 0

9:45 - 10:00 0 0 0 1 9:45 - 10:00 0 0 0 0 0 0

10:00 - 10:15 0 0 0 10:00 - 10:15 0 0 0

10:15 - 10:30 0 0 0 10:15 - 10:30 0 0 0

10:30 - 10:45 0 0 0 10:30 - 10:45 0 0 0

10:45 - 11:00 0 0 0 0 10:45 - 11:00 0 0 0 0 0 0

11:00 - 11:15 0 0 0 11:00 - 11:15 0 0 0

11:15 - 11:30 1 1 2 11:15 - 11:30 0 0 0

11:30 - 11:45 0 1 1 11:30 - 11:45 0 0 0

11:45 - 12:00 1 2 1 3 2 5 11:45 - 12:00 0 0 0 0 0 0

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TOTALS 5 7 12 10 13 23

ADT'S 15 20 35

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LOCATION - LAWRENCE CANYON-JUST W/O SANTIAGO CYN

VOLUMES FOR - TUESDAY 2/12/02

\*\*\*\*\* AM \*\*\*\*\*

\*\*\*\*\* PM \*\*\*\*\*

TIME	EB	WB	TOTAL	TIME	EB	WB	TOTAL
------	----	----	-------	------	----	----	-------

12:00 - 12:15	0	0	0	12:00 - 12:15	0	0	0
12:15 - 12:30	0	0	0	12:15 - 12:30	1	1	2
12:30 - 12:45	0	0	0	12:30 - 12:45	0	1	1
12:45 - 1:00	0	0	0	12:45 - 1:00	0	2	2

1:00 - 1:15	0	0	0	1:00 - 1:15	0	0	0
1:15 - 1:30	0	0	0	1:15 - 1:30	1	0	1
1:30 - 1:45	0	0	0	1:30 - 1:45	1	1	2
1:45 - 2:00	0	0	0	1:45 - 2:00	0	1	1

2:00 - 2:15	0	0	0	2:00 - 2:15	0	0	0
2:15 - 2:30	0	0	0	2:15 - 2:30	0	3	3
2:30 - 2:45	0	0	0	2:30 - 2:45	1	2	3
2:45 - 3:00	0	0	0	2:45 - 3:00	0	5	5

3:00 - 3:15	0	0	0	3:00 - 3:15	0	1	1
3:15 - 3:30	0	0	0	3:15 - 3:30	2	2	4
3:30 - 3:45	0	0	0	3:30 - 3:45	1	0	1
3:45 - 4:00	0	0	0	3:45 - 4:00	2	3	5

4:00 - 4:15	0	0	0	4:00 - 4:15	0	2	2
4:15 - 4:30	0	0	0	4:15 - 4:30	1	0	1
4:30 - 4:45	0	0	0	4:30 - 4:45	0	2	2
4:45 - 5:00	0	0	0	4:45 - 5:00	1	5	6

5:00 - 5:15	0	0	0	5:00 - 5:15	0	1	1
5:15 - 5:30	0	1	1	5:15 - 5:30	0	2	2
5:30 - 5:45	0	0	0	5:30 - 5:45	0	0	0
5:45 - 6:00	0	0	0	5:45 - 6:00	0	4	4

6:00 - 6:15	0	0	0	6:00 - 6:15	0	0	0
6:15 - 6:30	0	0	0	6:15 - 6:30	0	0	0
6:30 - 6:45	0	0	0	6:30 - 6:45	0	0	0
6:45 - 7:00	1	0	1	6:45 - 7:00	1	0	1

7:00 - 7:15	1	0	1	7:00 - 7:15	0	0	0
7:15 - 7:30	0	0	0	7:15 - 7:30	0	0	0
7:30 - 7:45	0	0	0	7:30 - 7:45	0	0	0
7:45 - 8:00	0	0	0	7:45 - 8:00	0	0	0

8:00 - 8:15	0	0	0	8:00 - 8:15	0	1	1
8:15 - 8:30	0	1	1	8:15 - 8:30	0	0	0
8:30 - 8:45	0	1	1	8:30 - 8:45	0	1	1
8:45 - 9:00	0	3	3	8:45 - 9:00	0	2	2

9:00 - 9:15	2	2	4	9:00 - 9:15	0	0	0
9:15 - 9:30	0	0	0	9:15 - 9:30	0	0	0
9:30 - 9:45	0	0	0	9:30 - 9:45	0	0	0
9:45 - 10:00	0	3	3	9:45 - 10:00	0	0	0

10:00 - 10:15	0	2	2	10:00 - 10:15	0	0	0
10:15 - 10:30	2	1	3	10:15 - 10:30	0	0	0
10:30 - 10:45	0	0	0	10:30 - 10:45	0	0	0
10:45 - 11:00	0	4	4	10:45 - 11:00	0	0	0

11:00 - 11:15	2	0	2	11:00 - 11:15	0	0	0
11:15 - 11:30	0	0	0	11:15 - 11:30	0	0	0
11:30 - 11:45	0	0	0	11:30 - 11:45	0	0	0
11:45 - 12:00	0	0	0	11:45 - 12:00	0	0	0

TOTALS	8	11	19	12	22	34
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ADT'S	20	33	53
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LOCATION - LAWRENCE CANYON-JUST W/O SANTIAGO CYN

VOLUMES FOR - WEDNESDAY 2/13/02

\*\*\*\*\* AM \*\*\*\*\*

\*\*\*\*\* PM \*\*\*\*\*

TIME	EB	WB	TOTAL	TIME	EB	WB	TOTAL
12:00 - 12:15	0	0	0	12:00 - 12:15	1	1	2
12:15 - 12:30	0	0	0	12:15 - 12:30	1	1	2
12:30 - 12:45	0	0	0	12:30 - 12:45	0	1	1
12:45 - 1:00	0	0	0	12:45 - 1:00	0	2	0
1:00 - 1:15	0	0	0	1:00 - 1:15	1	1	2
1:15 - 1:30	0	0	0	1:15 - 1:30	0	0	0
1:30 - 1:45	0	0	0	1:30 - 1:45	0	1	1
1:45 - 2:00	0	0	0	1:45 - 2:00	2	3	4
2:00 - 2:15	0	0	0	2:00 - 2:15	0	0	0
2:15 - 2:30	0	0	0	2:15 - 2:30	0	1	1
2:30 - 2:45	0	0	0	2:30 - 2:45	0	0	0
2:45 - 3:00	0	0	0	2:45 - 3:00	2	2	0
3:00 - 3:15	0	0	0	3:00 - 3:15	2	1	3
3:15 - 3:30	0	0	0	3:15 - 3:30	0	2	2
3:30 - 3:45	0	0	0	3:30 - 3:45	2	0	2
3:45 - 4:00	0	0	0	3:45 - 4:00	0	4	0
4:00 - 4:15	0	0	0	4:00 - 4:15	0	1	1
4:15 - 4:30	0	0	0	4:15 - 4:30	0	2	2
4:30 - 4:45	0	0	0	4:30 - 4:45	1	1	2
4:45 - 5:00	0	0	0	4:45 - 5:00	0	1	0
5:00 - 5:15	0	0	0	5:00 - 5:15	0	0	0
5:15 - 5:30	0	0	0	5:15 - 5:30	0	0	0
5:30 - 5:45	0	0	0	5:30 - 5:45	1	0	1
5:45 - 6:00	0	0	0	5:45 - 6:00	0	1	0
6:00 - 6:15	0	0	0	6:00 - 6:15	0	1	1
6:15 - 6:30	0	0	0	6:15 - 6:30	0	1	1
6:30 - 6:45	0	0	0	6:30 - 6:45	0	0	0
6:45 - 7:00	0	0	1	6:45 - 7:00	0	0	0
7:00 - 7:15	1	0	1	7:00 - 7:15	0	0	0
7:15 - 7:30	0	0	0	7:15 - 7:30	0	1	1
7:30 - 7:45	0	0	0	7:30 - 7:45	0	0	0
7:45 - 8:00	0	1	0	7:45 - 8:00	0	0	0
8:00 - 8:15	0	0	0	8:00 - 8:15	0	0	0
8:15 - 8:30	1	1	2	8:15 - 8:30	0	0	0
8:30 - 8:45	1	2	3	8:30 - 8:45	0	1	1
8:45 - 9:00	2	4	0	8:45 - 9:00	0	0	0
9:00 - 9:15	1	0	1	9:00 - 9:15	0	1	1
9:15 - 9:30	2	0	2	9:15 - 9:30	0	0	0
9:30 - 9:45	0	0	0	9:30 - 9:45	0	0	0
9:45 - 10:00	0	3	0	9:45 - 10:00	0	0	0
10:00 - 10:15	0	1	1	10:00 - 10:15	0	0	0
10:15 - 10:30	0	0	0	10:15 - 10:30	0	0	0
10:30 - 10:45	0	1	1	10:30 - 10:45	0	0	0
10:45 - 11:00	0	0	0	10:45 - 11:00	0	0	0
11:00 - 11:15	0	0	0	11:00 - 11:15	0	0	0
11:15 - 11:30	0	0	0	11:15 - 11:30	0	0	0
11:30 - 11:45	1	1	2	11:30 - 11:45	0	0	0
11:45 - 12:00	0	1	2	11:45 - 12:00	0	0	0

TOTALS	9	9	18	13	20	33
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ADT'S	22	29	51
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















LOCATION - LAWRENCE CANYON-JUST W/O SANTIAGO CYN





















VOLUMES FOR - THURSDAY 2/14/02

***** AM *****						***** PM *****					
TIME	EB	WB	TOTAL			TIME	EB	WB	TOTAL		
12:00 - 12:15	0	0	0	0		12:00 - 12:15	-	-	-	-	
12:15 - 12:30	0	0	0	0		12:15 - 12:30	-	-	-	-	
12:30 - 12:45	0	0	0	0		12:30 - 12:45	-	-	-	-	
12:45 - 1:00	0	0	0	0	0	12:45 - 1:00	-	-	-	-	-
1:00 - 1:15	0	0	0	0		1:00 - 1:15	-	-	-	-	
1:15 - 1:30	0	0	0	0		1:15 - 1:30	-	-	-	-	
1:30 - 1:45	0	0	0	0		1:30 - 1:45	-	-	-	-	
1:45 - 2:00	0	0	0	0	0	1:45 - 2:00	-	-	-	-	-
2:00 - 2:15	0	0	0	0		2:00 - 2:15	-	-	-	-	
2:15 - 2:30	0	0	0	0		2:15 - 2:30	-	-	-	-	
2:30 - 2:45	0	0	0	0		2:30 - 2:45	-	-	-	-	
2:45 - 3:00	0	0	0	0	0	2:45 - 3:00	-	-	-	-	-
3:00 - 3:15	0	0	0	0		3:00 - 3:15	-	-	-	-	
3:15 - 3:30	0	0	0	0		3:15 - 3:30	-	-	-	-	
3:30 - 3:45	0	0	0	0		3:30 - 3:45	-	-	-	-	
3:45 - 4:00	0	0	0	0	0	3:45 - 4:00	-	-	-	-	-
4:00 - 4:15	0	0	0	0		4:00 - 4:15	-	-	-	-	
4:15 - 4:30	0	0	0	0		4:15 - 4:30	-	-	-	-	
4:30 - 4:45	0	0	0	0		4:30 - 4:45	-	-	-	-	
4:45 - 5:00	0	0	0	0	0	4:45 - 5:00	-	-	-	-	-
5:00 - 5:15	0	0	0	0		5:00 - 5:15	-	-	-	-	
5:15 - 5:30	0	0	0	0		5:15 - 5:30	-	-	-	-	
5:30 - 5:45	0	0	0	0		5:30 - 5:45	-	-	-	-	
5:45 - 6:00	0	0	0	0	0	5:45 - 6:00	-	-	-	-	-
6:00 - 6:15	0	0	0	0		6:00 - 6:15	-	-	-	-	
6:15 - 6:30	0	0	0	0		6:15 - 6:30	-	-	-	-	
6:30 - 6:45	0	2	2	2		6:30 - 6:45	-	-	-	-	
6:45 - 7:00	0	0	0	2	2	6:45 - 7:00	-	-	-	-	-
7:00 - 7:15	1	3	4	4		7:00 - 7:15	-	-	-	-	
7:15 - 7:30	1	1	2	2		7:15 - 7:30	-	-	-	-	
7:30 - 7:45	0	0	0	0		7:30 - 7:45	-	-	-	-	
7:45 - 8:00	0	2	0	4	6	7:45 - 8:00	-	-	-	-	-
8:00 - 8:15	0	0	0	0		8:00 - 8:15	-	-	-	-	
8:15 - 8:30	0	1	1	1		8:15 - 8:30	-	-	-	-	
8:30 - 8:45	0	0	0	0		8:30 - 8:45	-	-	-	-	
8:45 - 9:00	0	0	0	1	1	8:45 - 9:00	-	-	-	-	-
9:00 - 9:15	0	0	0	0		9:00 - 9:15	-	-	-	-	
9:15 - 9:30	0	0	0	0		9:15 - 9:30	-	-	-	-	
9:30 - 9:45	0	2	2	2		9:30 - 9:45	-	-	-	-	
9:45 - 10:00	0	0	0	2	2	9:45 - 10:00	-	-	-	-	-
10:00 - 10:15	0	0	0	0		10:00 - 10:15	-	-	-	-	
10:15 - 10:30	0	1	1	1		10:15 - 10:30	-	-	-	-	
10:30 - 10:45	1	0	1	1		10:30 - 10:45	-	-	-	-	
10:45 - 11:00	0	1	2	3	4	10:45 - 11:00	-	-	-	-	-
11:00 - 11:15	0	2	2	2		11:00 - 11:15	-	-	-	-	
11:15 - 11:30	0	1	1	1		11:15 - 11:30	-	-	-	-	
11:30 - 11:45	0	0	0	0		11:30 - 11:45	-	-	-	-	
11:45 - 12:00	0	0	1	4	4	11:45 - 12:00	-	-	-	-	-
*****											
TOTALS	3	16	19	19							
ADT'S						3	16	19			
*****											

# **APPENDIX B**

## **HCM Delay Calculations**

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Volume (veh/h)	0	250	1	1	227	7	1	0	1	28	0	12
Sign Control	Free				Free				Stop		Stop	
Grade	0%				0%				0%		0%	
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Hourly flow rate (vph)	0	272	1	1	247	8	1	0	1	30	0	13
Pedestrians												
Lane Width (ft)												
Walking Speed (ft/s)												
Percent Blockage												
Right turn flare (veh)												
Median type	None			None								
Median storage veh												
Upstream signal (ft)												
pX, platoon unblocked												
vC, conflicting volume	254			273			534	528	272	522	522	247
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	254			273			534	528	272	522	522	247
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	100			100			100	100	100	93	100	98
cM capacity (veh/h)	1311			1290			449	455	767	465	459	792
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2			
Volume Total	0	272	1	1	247	8	2	30	13			
Volume Left	0	0	0	1	0	0	1	30	0			
Volume Right	0	0	1	0	0	8	1	0	13			
cSH	1700	1700	1700	1290	1700	1700	567	465	792			
Volume to Capacity	0.00	0.16	0.00	0.00	0.15	0.00	0.00	0.07	0.02			
Queue Length 95th (ft)	0	0	0	0	0	0	0	5	1			
Control Delay (s)	0.0	0.0	0.0	7.8	0.0	0.0	11.4	13.3	9.6			
Lane LOS				A			B		B	A		
Approach Delay (s)	0.0			0.0			11.4	12.2				
Approach LOS							B		B			
Intersection Summary												
Average Delay				1.0								
Analysis Period (min)				15								

																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations																		
Volume (veh/h)	7	287	1	1	331	30	1	0	1	20	0	8						
Sign Control	Free			Free			Stop			Stop								
Grade	0%			0%			0%			0%								
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88						
Hourly flow rate (vph)	8	326	1	1	376	34	1	0	1	23	0	9						
Pedestrians																		
Lane Width (ft)																		
Walking Speed (ft/s)																		
Percent Blockage																		
Right turn flare (veh)																		
Median type	None			None														
Median storage veh																		
Upstream signal (ft)																		
pX, platoon unblocked																		
vC, conflicting volume	410				327				730	755	326	722	722	376				
vC1, stage 1 conf vol																		
vC2, stage 2 conf vol																		
vCu, unblocked vol	410				327				730	755	326	722	722	376				
tC, single (s)	4.1				4.1				7.1	6.5	6.2	7.1	6.5	6.2				
tC, 2 stage (s)																		
tF (s)	2.2				2.2				3.5	4.0	3.3	3.5	4.0	3.3				
p0 queue free %	99				100				100	100	100	93	100	99				
cM capacity (veh/h)	1149				1232				332	335	715	340	350	670				
Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1	SB 2									
Volume Total	8	326	1	1	376	34	2	23	9									
Volume Left	8	0	0	1	0	0	1	23	0									
Volume Right	0	0	1	0	0	34	1	0	9									
cSH	1149	1700	1700	1232	1700	1700	453	340	670									
Volume to Capacity	0.01	0.19	0.00	0.00	0.22	0.02	0.01	0.07	0.01									
Queue Length 95th (ft)	1	0	0	0	0	0	0	5	1									
Control Delay (s)	8.2	0.0	0.0	7.9	0.0	0.0	13.0	16.4	10.4									
Lane LOS	A				A				B	C	B							
Approach Delay (s)	0.2				0.0				13.0	14.7								
Approach LOS							B	B										
Intersection Summary																		
Average Delay				0.7														
Analysis Period (min)				15														

# **APPENDIX C**

## **Sight Distance Plan**



